Getting Started with Git

Understanding Version Control Systems and Git

* Version Control Systems (VCS) maintain a history of changes to files for reference or rollback
* Collaboration tool
* Two components:
  + Centralized VCS – Relies on a master database to maintain all data, history, file revisions, etc…
* Git
  + Every person working on a project will have the full repository – Distributed VCS
  + Distributed VCS allows for a full clones of the entire historical record
  + Creating your first Repository
    - Repository – A collection of files that GIT tracks changes for
      * One directory with its subdirectories
      * The .git subdirectory makes it a repo
      * Can be created from scratch or cloned
    - #git config –global user.name “name”
    - #git config –global.email “email”
    - #git config –list
    - #git init
      * Initialize the current worker folder (NOTE: NOTHING IS TRACKED JUST YET UNTIL YOU STAGE IT)
    - #git add *folder name* or \*.\* to add everything inside
    - #git commit -m “*message here*” – to commit it and finally add the files you staged to the repository and be tracked by GIT
    - #git status – shows you changes or modifications
  + Files in Git have a 3-Staged Lifecycle
    - Unmodified
      * First added
    - Modified
      * When things are added or changed and it is now modified
    - Staged
      * When it is staged, it is now ready to be committed
      * Once a staged file has been committed, it revolves back to stage 1